



SAH
#24
7-10-02

PATENTS

RECEIVED
FEB 20 2002
TC 1700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of
Marie-Christine VERNHES et al.

Serial No. 09/975,953

GROUP

1744

Filed October 15, 2001

Examiner Soubra
~~Unassigned~~

METHOD FOR ELIMINATING PROTOZOA, IN PARTICULAR FREE LIVING AMOEBAS IN A COLONISED AQUEOUS FLOW, A METHOD FOR TREATING AN AQUEOUS FLOW BY ELECTROPULSING, AND ITS APPLICATION TO ELIMINATING PROTOZOA

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents

Washington, D.C. 20231

Sir:

In compliance with Rules 1.97 and 1.98, and in fulfillment of the duty of disclosure under Rule 1.56, the following documents, copies of which are attached to this statement, are made of record on the enclosed sheet.

A concise description of the relevance of the following items is provided on pages 3-8 of the present specification:

References listed on pages 2-3 on the attached PTO-Form 1449.

In addition, the remaining documents, copies of which are attached to this statement, are also made of record on the enclosed sheet.

A concise explanation of the relevance of these latter items is that we are advised by our client that these references were cited by the Patent Office in the corresponding

Serial No. 09/975,953

International application Serial No. PCT/FR00/00981, filed April 14, 2000. A copy of the International Search Report in which they were cited is attached hereto.

Respectfully submitted,

YOUNG & THOMPSON

By



Robert J. Patch
Attorney for Applicants
Registration No. 17,355
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

February 19, 2002

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
B4145AB

SERIAL NO.
09/975,953

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use several sheets if necessary)

37 CFR 1.98(b)

APPLICANT
Marie-Christine VERNHES et al.

FILING DATE 00
October 15, 2001

GROUP
1744

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,695,472	09/87	Dunn et al.			
	AB	5,690,978	11/97	Yin et al.			
	AC						
	AD						
	AE						
	AF						
	AG						

RECEIVED
FEB 20 2002
TC 1700

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NO.	PUBL. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANSLATION YES NO
	AI	97/05067	02/97	WO			
	AJ	2 288 060	05/76	FR			
	AK	99/39752	08/99	WO			
	AL						
	AM						
	AN						
	AO						

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

	AT	
	AU	
	AV	
	AW	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
B4145ABSERIAL NO.
09/975,953INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

37 CFR 1.98(b)

APPLICANT
Marie-Christine VERNHES et al.FILING DATE
October 15, 2001GROUP
1744

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

1	J. Bernhardt et al., "On the Generation of Potential Differences across the Membrances of Ellipsoidal Cells in an Alternating Electrical Field," <u>Biophysik</u> , V. 10, 1973, pp. 89-98.
2	Kazuhiko Kinoshita et al., "Voltage-Induced Conductance in Human Erythrocyte Membranes," <u>Biochimica et Biophysica Acta</u> , V. 554, 1979 pp. 479-497.
3	Justin Teissie et al., "Electric Field Induced Transient Pores in Phospholipid Bilayer Vesicles," <u>Biochemistry</u> , V. 20, 1981 pp. 1948-1554.
4	S.Y. Ho et al., "Electroporation of Cell Membranes: A Review," <u>Critical Reviews in Biotechnology</u> , V. 16, 1996, pp. 349-362.
5	Lluís M. Mir et al., "Introduction of Definite Amounts of Nonpermeant Molecules into Living Cells after Electroporation: Direct Access to the Cytosol," <u>Experimental Cell Research</u> , V. 175, 1988, pp. 15-25.
6	Tian Y. Tsong, "Electroporation of Cell Membranes," <u>Biophys. J.</u> , V. 60, 1991, pp. 297-306.
7	Ivan Hapala, "Breaking the Barrier: Method for Reversible Permeabilization of Cellular Membranes," <u>Critical Reviews in Biotechnology</u> , V. 17, 1997, pp. 105-122.
8	W.A. Hamilton et al., "Effects of High Electric Fields on Microorganisms: II. Mechanism of Action of the Lethal Effect," <u>Biochimica et Biophysica Acta</u> , V. 148, 1967, pp. 789-800.
9	A.J.H. Sale et al., "Effects of High Electric Fields on Microorganisms: I: Killing of Bacteria and Yeasts," <u>Biochim. Biophys. Acta</u> , V. 148, 1967, pp. 781-788.
10	A.J.H. Sale et al., "Effects of High Electric Fields on Microorganisms: III: Lysis of Erythrocytes and Protoplasts," <u>Biochim. Biophys. Acta</u> , V. 163, 1968, pp. 37-43.
11	H. Hülshager et al., "Killing of Bacteria with Electric Pulses of High Field Strength," <u>Radiat. Environ. Biophys.</u> , V. 20, 1981, pp. 53-65.
12	H. Hülshager et al., "Electric Field Effects on Bacteria and Yeast Cells," <u>Radiat. Environ. Biophys.</u> , V. 22, 1983, pp. 149-162.
13	Akira Mizuno et al., "Destruction of Living Cells by Pulsed High-Voltage Application," <u>IEEE Transactions on Industry Applications</u> , V. 24, 1988, pp. 387-394.
14	M.M. Kekez et al., "Contribution to the Biophysics of the Lethal Effects of Electric Field on Microorganisms," <u>Biochim. Biophys. Acta</u> , V. 1278, 1996, pp. 79-88.
15	T. Grahl et al., "Killing of Microorganisms by Pulsed Electric Fields," <u>Appl. Microbiol. Biotechnol.</u> , V. 45, 1996, pp. 148-157.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
B4145AB

SERIAL NO.
09/975,953

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use several sheets if necessary.)

37 CFR 1.98(b)

APPLICANT
Marie-Christine VERNHES et al.

FILING DATE
October 15, 2001

GROUP
1744

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

16	Sheshakamal Jayaram et al., "Kinetics of Sterilization of <i>Lactobacillus brevis</i> Cells by the Application of High Voltage Pulses," <i>Biotechnology and Bioengineering</i> , V. 40, 1992, pp. 1412-1420.
17	Dietrich Knorr et al., "Food Application of High Electric Field Pulses," <i>Trends in Food Science and Technology</i> , V. 51, 1994, pp. 71-75.
18	Bai-Lin Qin et al., "Nonthermal Pasteurization of Liquid Foods Using High-Intensity Pulsed Electric Fields," <i>Critical Reviews in Food Science and Nutrition</i> , " V. 36, 1996, pp. 603-627.
19	Bai-Lin Qin et al., "Inactivating Microorganisms Using a Pulsed Electric Field Continuous Treatment System," <i>IEEE Transactions on Industry Application</i> , V. 34, 1998, pp. 43-50.
20	J. Teissié et al., "Electrofusioin of Large Volumes of Cells in Culture," <i>Bioelectrochemistry and Bioenergetics</i> , V. 19, 1988, pp. 49-57.
21	J. Teissié et al., "Electrofusioin of Large Volumes of Cells in Culture: Part II: Cells Growing in Suspension," <i>Bioelectrochemistry and Bioenergetics</i> , V. 19, 1988, pp. 59-66.
22	S. Sixou et al., "Specific Electroporabilization of Leucocytes in a Blood Sample and Application to Large Volumes of Cells," <i>Biochimica et Biophysica Acta</i> , V. 1028, 1990, pp. 154-160.
23	J. Teissié et al., "Large Volume Cell Electroporabilization and Electrofusioin by a Flow Process," Allen Ed, Birkhauser Press, 1992, pp. 449-466.
24	Marie-Pierre Rols et al., "Highly Efficient Transfection of Mammalian Cells by Electric Field Pulses," <i>Eur. J. Biochem.</i> , V. 206, 1992, pp. 115-121.
25	U. Brüggemann et al., "Low-Oxygen-Affinity Red Cells Produced in a Large-Volume, Continuous-Flow Electroporation System," <i>Transfusion</i> , V. 35, 1995, pp. 478-486.
26	Usha R. Pothakamury et al., "Effect of Growth Stage and Processing Temperature on the Inactivation of <i>E. coli</i> by Pulsed Electric Fields," <i>Journal of Protection</i> , V. 59, 1996, pp. 1167-1171.
27	O. Martín-Belloso et al., "Inactivation of <i>Escherichia Coli</i> Suspended in Liquid Egg Using Pulsed Electric Fields," <i>Journal of Food Processing and Preservation</i> , V. 21, 1997, pp. 193-208
28	D. Gásková et al., "Effect of High-Voltage Electric Pulses on Yeast Cells: Factors Influencing the Killing Efficiency," <i>Bioelectrochemistry and Bioenergetics</i> , V. 39, 1996, pp. 195-202.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED
FEB 20 2002
TC 1700

REFERENCES

1. Bernhardt J. et al., *Biophysik* 10:89-98 (1973)
2. Kinoshita K. et al., *Biochim. Biophys. Acta* 554:479-497 (1979)
3. Teissié J. et al., *Biochemistry* 20: 1548-1554 (1981)
- 5 4. Ho S.Y. et al., *Critical Reviews in Biotechnology*, 16: 349-362 (1996)
5. Mir L.M. et al., *Experimental Cell Research* 175: 15-25(1988)
6. Tsong T.Y., *Biophys. J.* 60: 297-306 (1991)
7. Hapala I, *Critical Reviews In Biotechnology* 17: 105-122 (1997)
8. Hamilton W.A. et al., *Biochim. Biophys. Acta.* 148: 789-800 (1967)
- 10 9. Sale J.H. et al., *Biochim. Biophys. Acta.* 148: 781-788 (1967)
10. Sale J.H. et al., *Biochim. Biophys. Acta.* 163: 37-43(1968)
11. Hulsheger H. et al., *Radiat. Environ. Biophys.* 20: 53-65 (1981)
12. Hulsheger H. et al., *Radiat. Environ. Biophys.* 22:149-162(1983)
13. Mizuno A. et al., *IEEE Transactions on Industry Applications* 24: 387-394 (1988)
- 15 14. Kekez M.M. et al., *Biochim. Biophys. Acta* 1278: 79-88 (1996)
15. Gralh T. et al., *Appl. Microbiol. Biotechnol.* 45: 148-157 (1996)
16. Jayaram S. et al., *Biotechnology and Bioengineering.* 40: 1412-1420 (1992)
17. Knorr D. et al, *Trends in Food Science and Technology* 51: 71-75 (1994)
18. Qin B-L. et al., *Critical Reviews in Food Science and Nutrition.* 36: 603-627(1996)
- 20 19. Qin B-L. et al., *IEEE Transactions on Industry Application.* 34: 43-50 (1998)
20. Teissié J. et al., *Bioelectrochem. Bioenerg.* 19: 49-57(1988)
21. Teissié J. et al., *Bioelectrochem. Bioenerg.* 19: 59-66 (1988)
22. Sixou S. et al., *Biochim. Biophys. Acta.* 1028: 154-160 (1990)
23. Teissié J. et al., "Charge and Field effects in Biosystems III", Allen Ed, Birkhauser
25 press pp 449-466 (1992)
24. Rols M.P. et al., *Eur. J Biochem.* 206: 115-121(1992)
25. Bruggemann U. et al., *Transfusion* 35: 478-486 (1995)
26. Pothakamury U.R. et al. *Journal of Protection* 59:1167-1171(1996)
27. Martin-Bellaos o.m. et al. *Journal of Food Processing and Preservation* 21:1 93-208
30 (1997)
28. Gaskova et al. *Bioelectrochem. Bioenerg.* 39:195-202 (1996).